Cardiac Surgery

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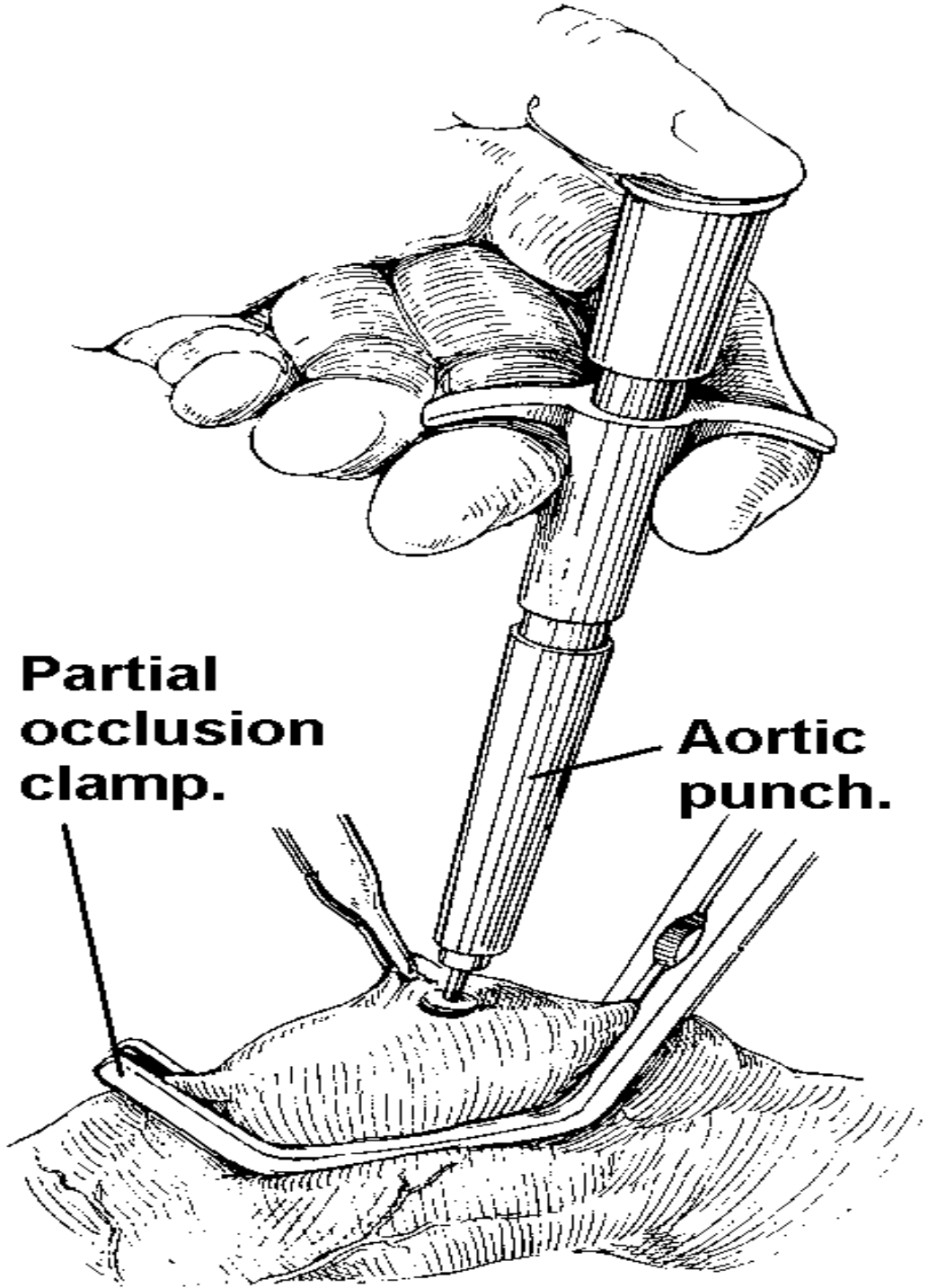
Terminology Related to Cardiac Surgery

Cardio-pulmonary Bypass

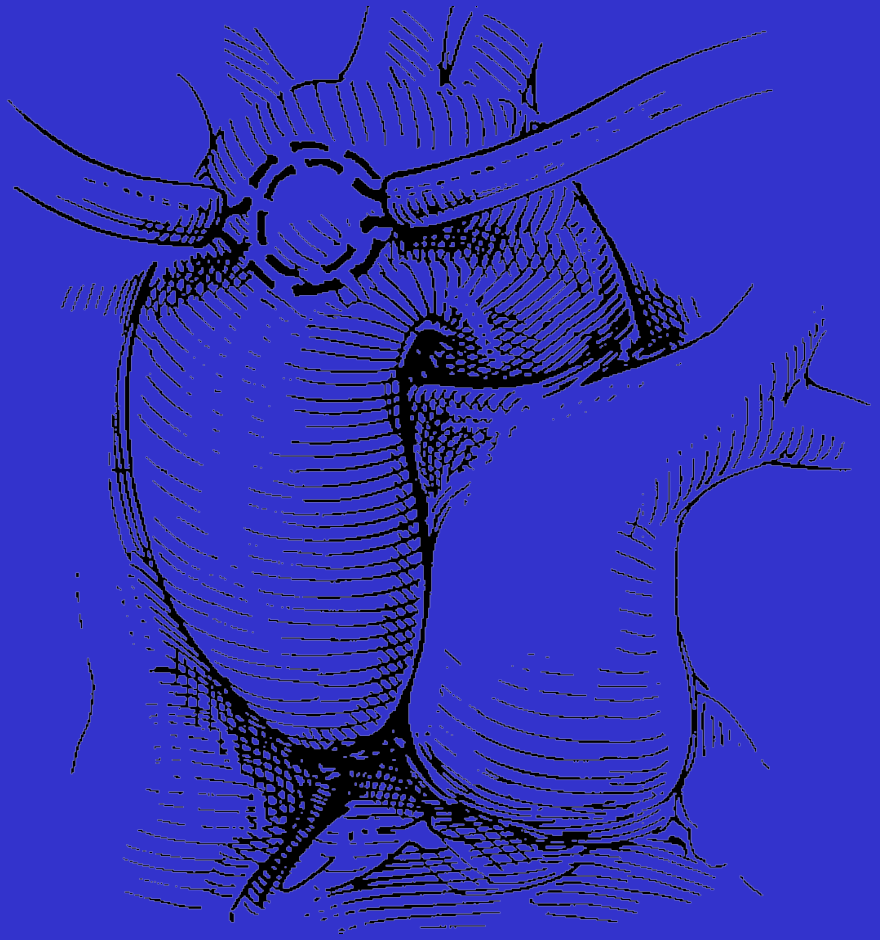
Special tubes are inserted into the heart and/or blood vessels to divert blood around the heart and lungs and through a mechanical pump (heart/lung machine).

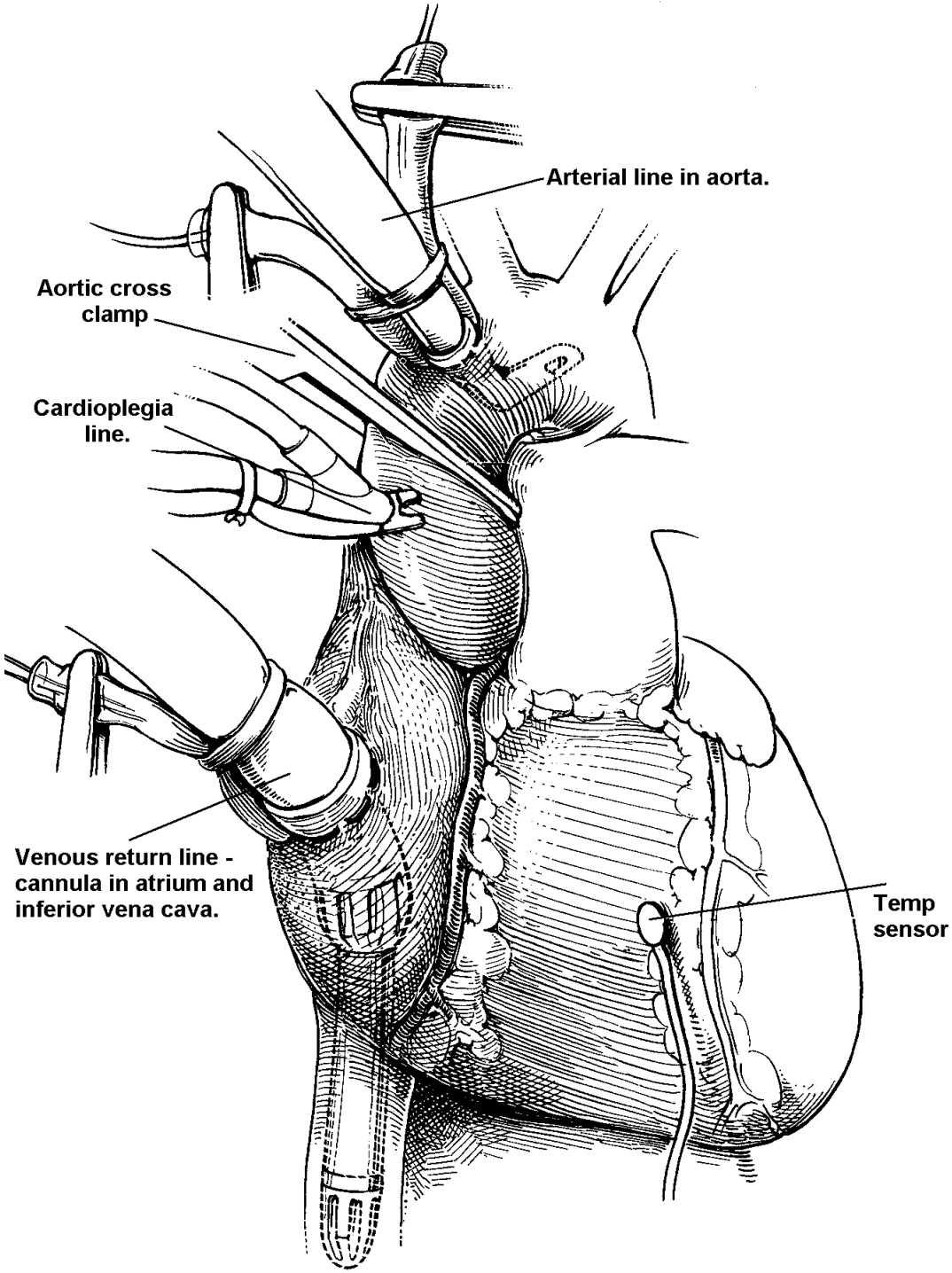
Cannulation

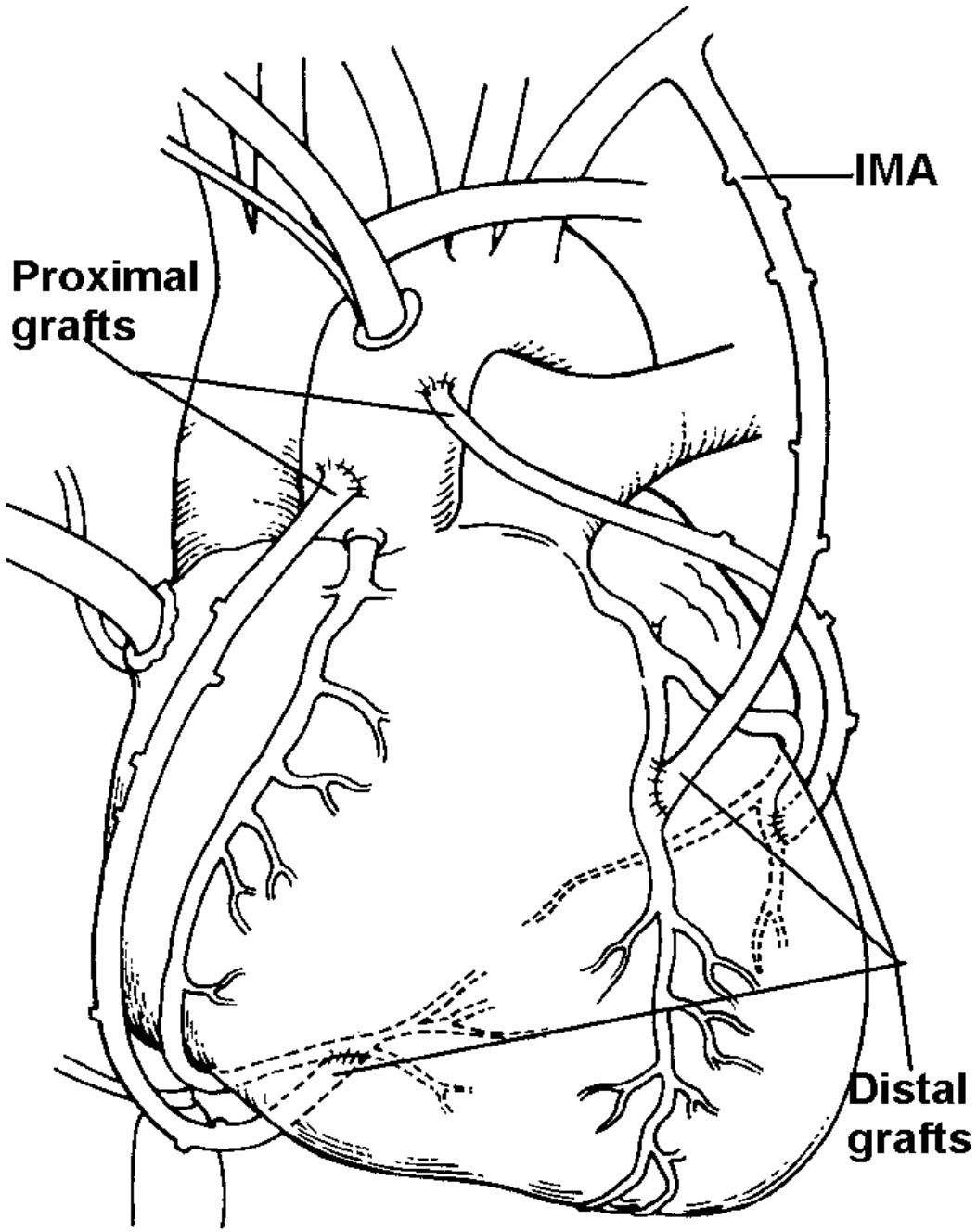
Process by which cannulas are inserted into the heart and/or blood vessels to allow for cardio-pulmonary bypass.


Partial occlusion clamp.
Aortic punch.

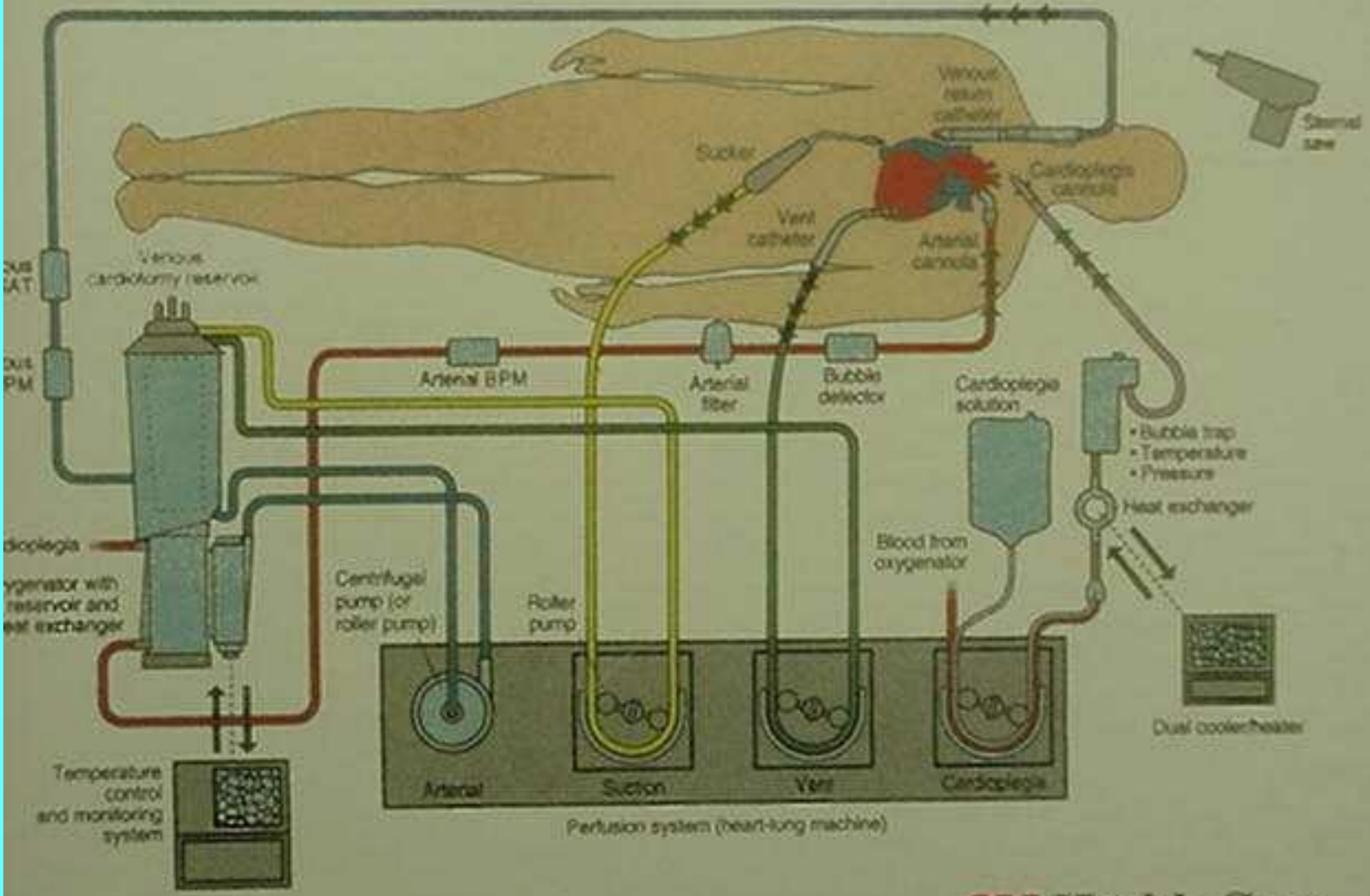
Cannulation stitches Arterial cannulation site.



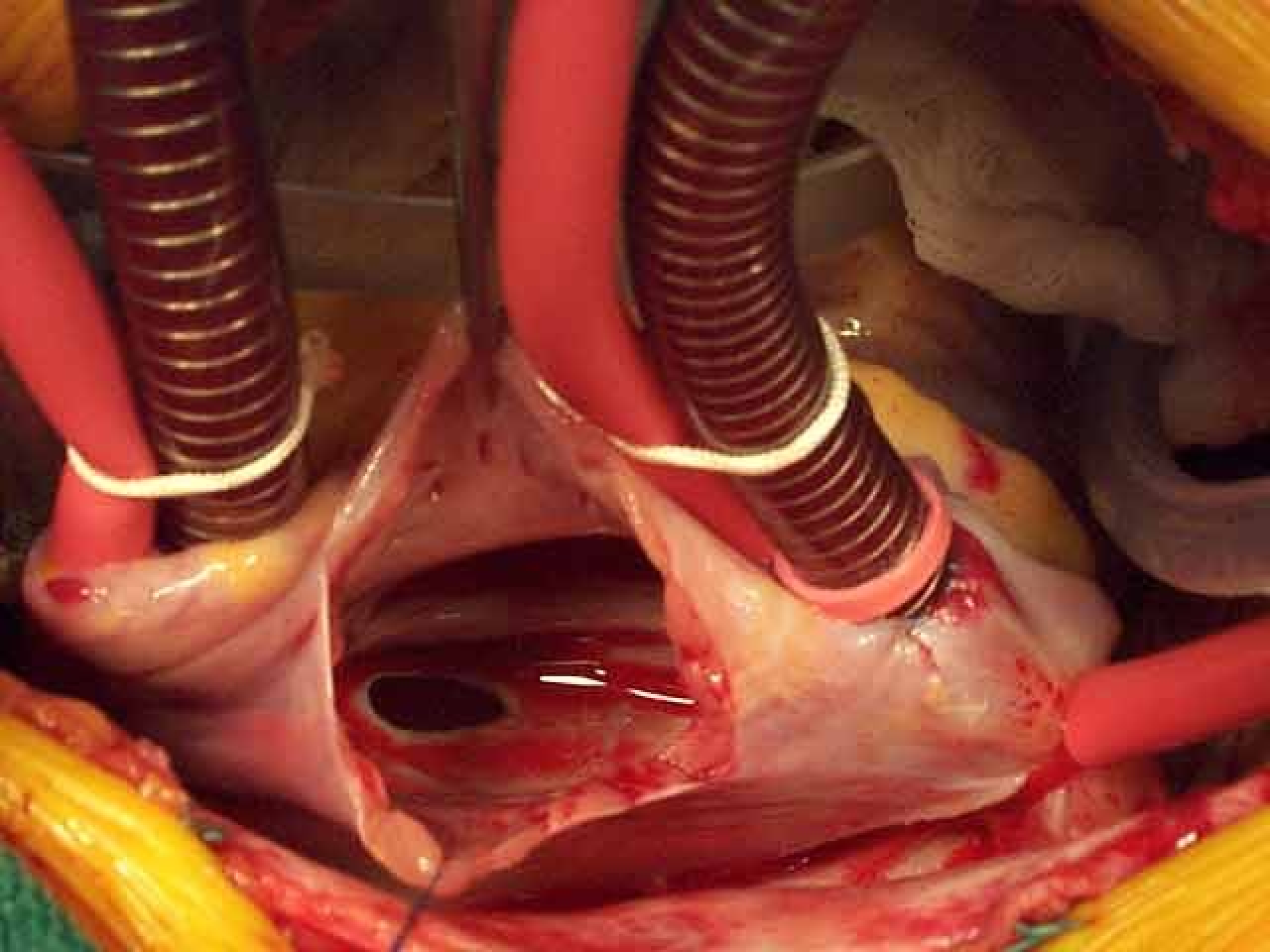

Arterial line in aorta.
Aortic cross clamp
Cardioplegia line.
Venous return line - cannula in atrium and inferior vena cava.
Temp sensor


IMA
Proximal grafts
Distal grafts

Cardiovascular Surgery: Sarns™ and CDI™ Products



3M Health Care



Fibrillation

Condition in which the heart quivers instead of beating. Heart muscle fibers in fibrillation use more oxygen than they do when beating normally.

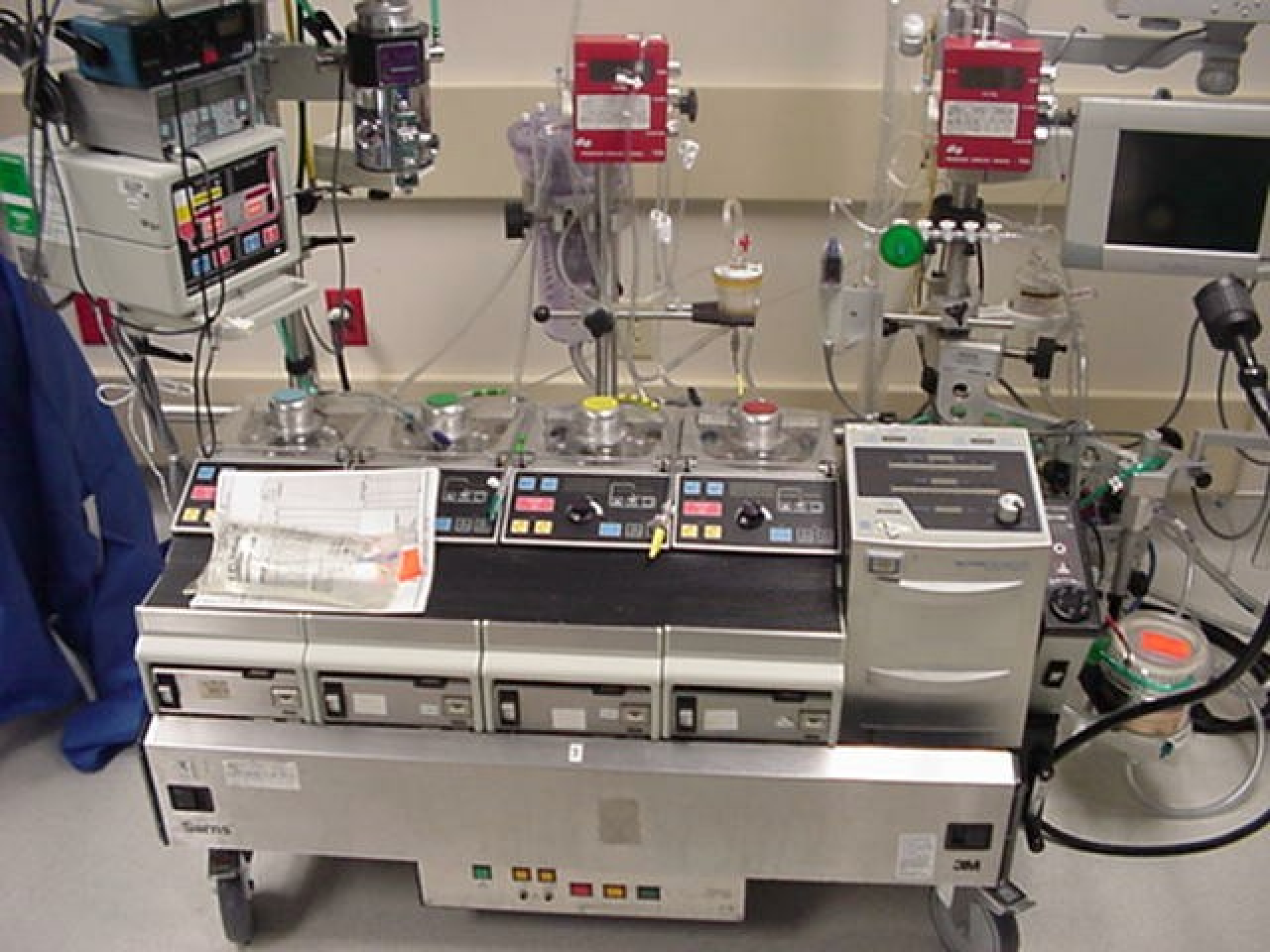
Heparinization

The administration of heparin in a large dose to produce anticoagulation. This is necessary during a CABG to prevent blood clots from forming in the bypass lines or tubes.

Hypothermia

Lowered body temperature. Done intentionally during many cardiac procedures as a means to protect the patient (at lower temperatures, cells use less oxygen).

Preparation of the Operating Room for Cardiac Surgery

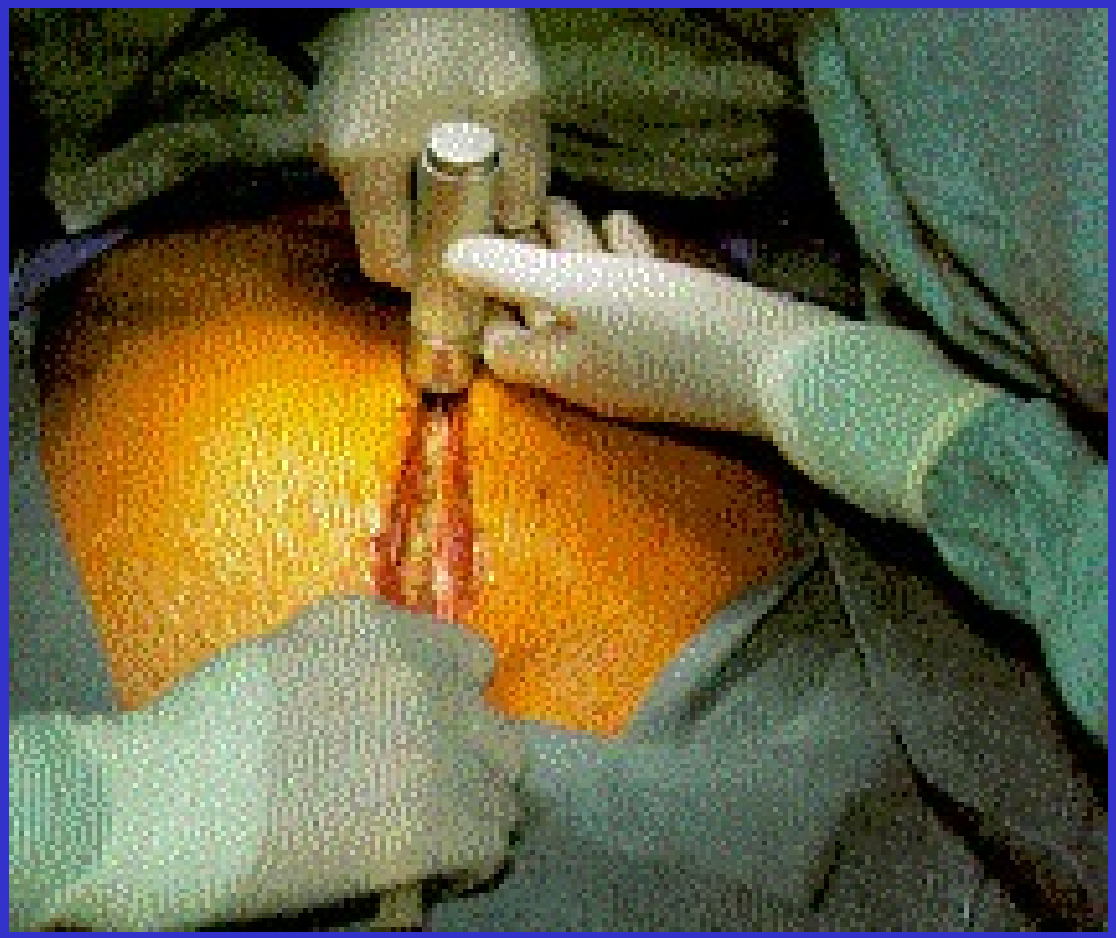


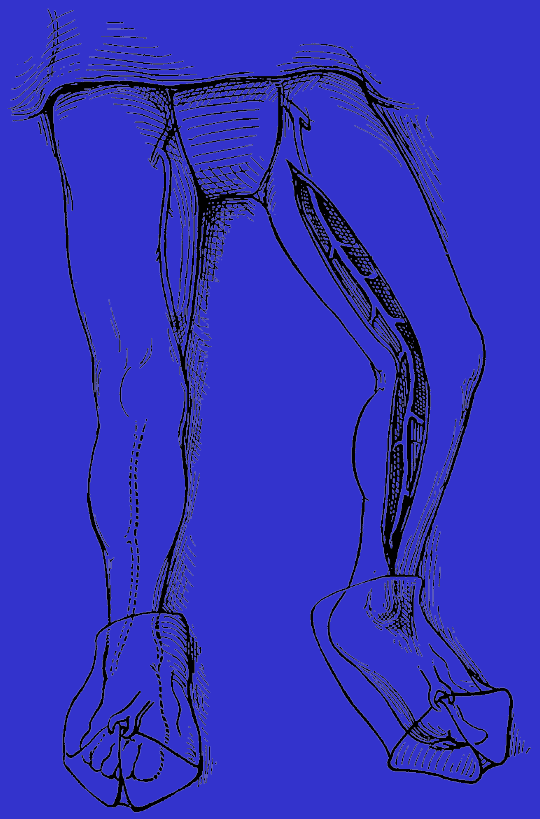
Special Medications

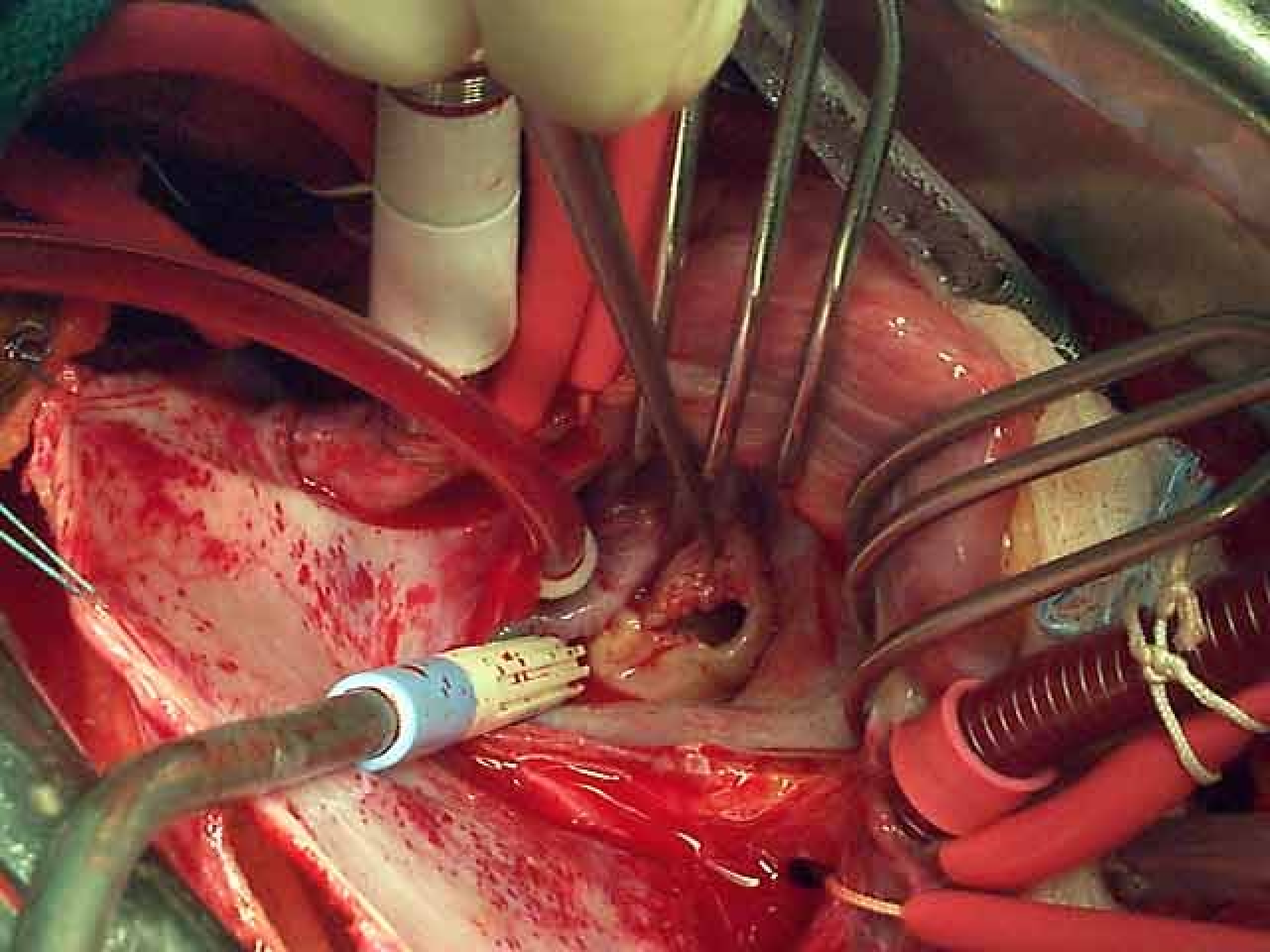
- Heparin
- Protamine
- Cardioplegia solution
- Papavarine
- Antibiotic irrigation
- Hemostatic agents

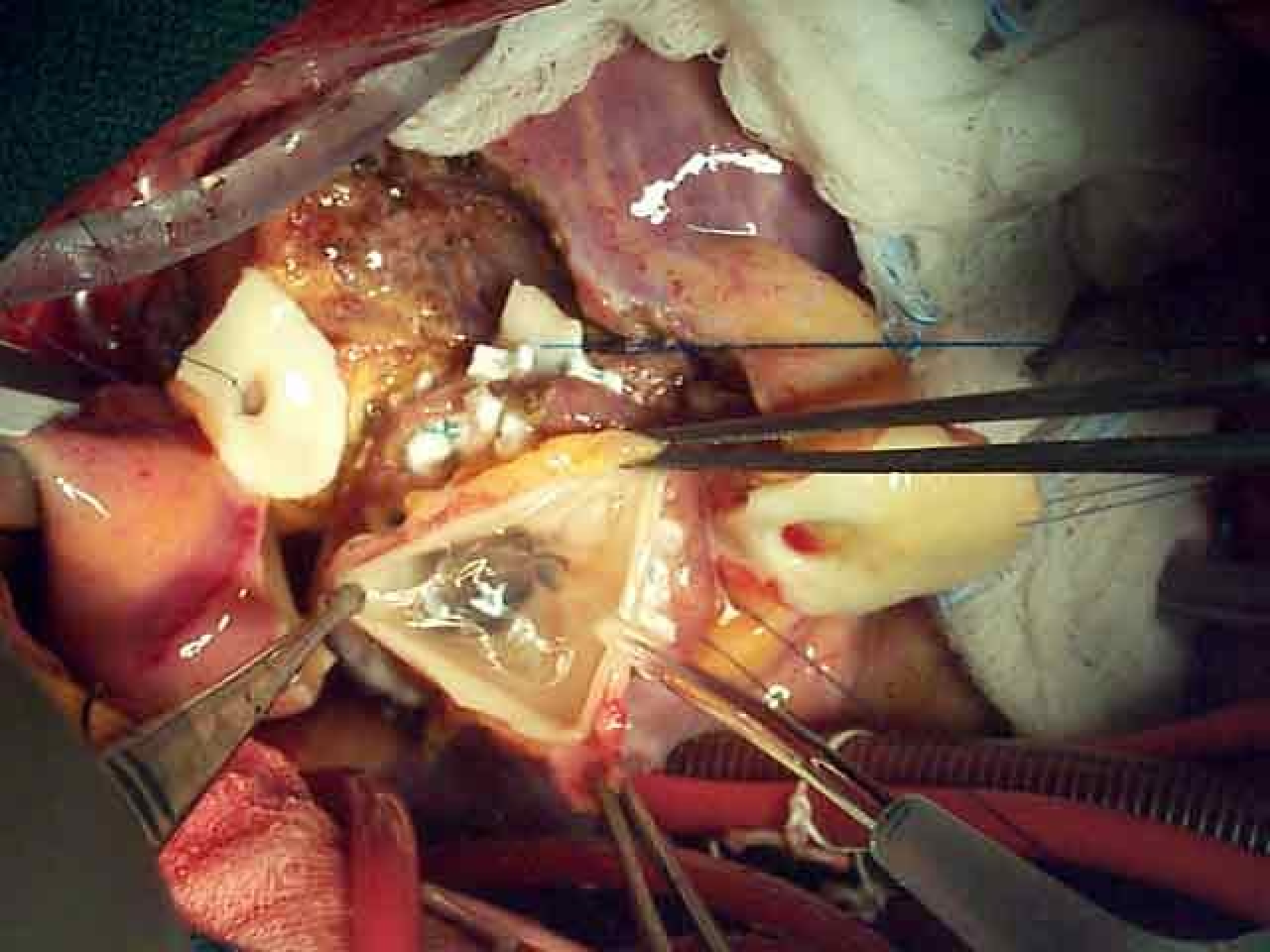
Selected Cardiac Surgical Procedures

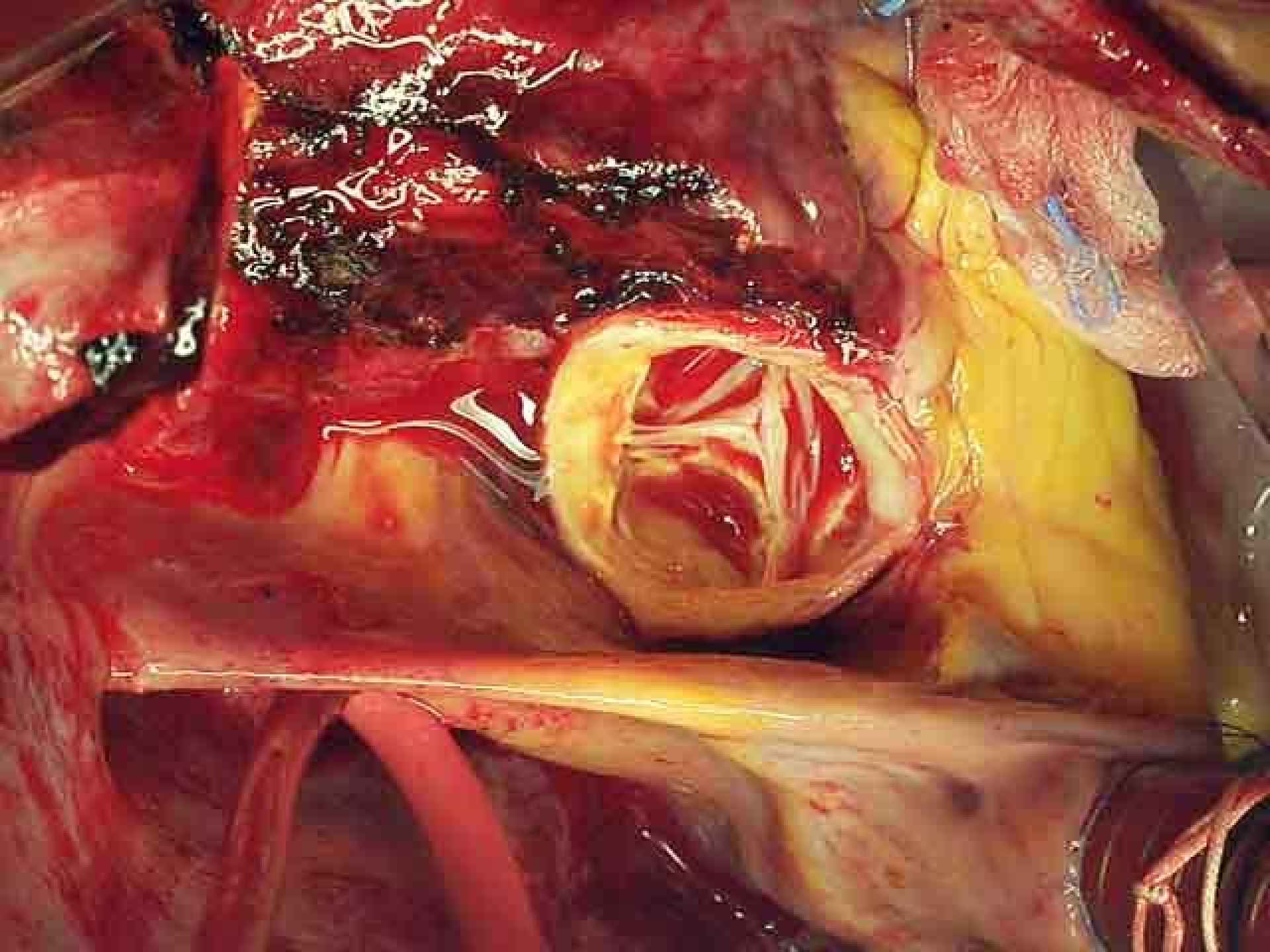
Mediansternotomy

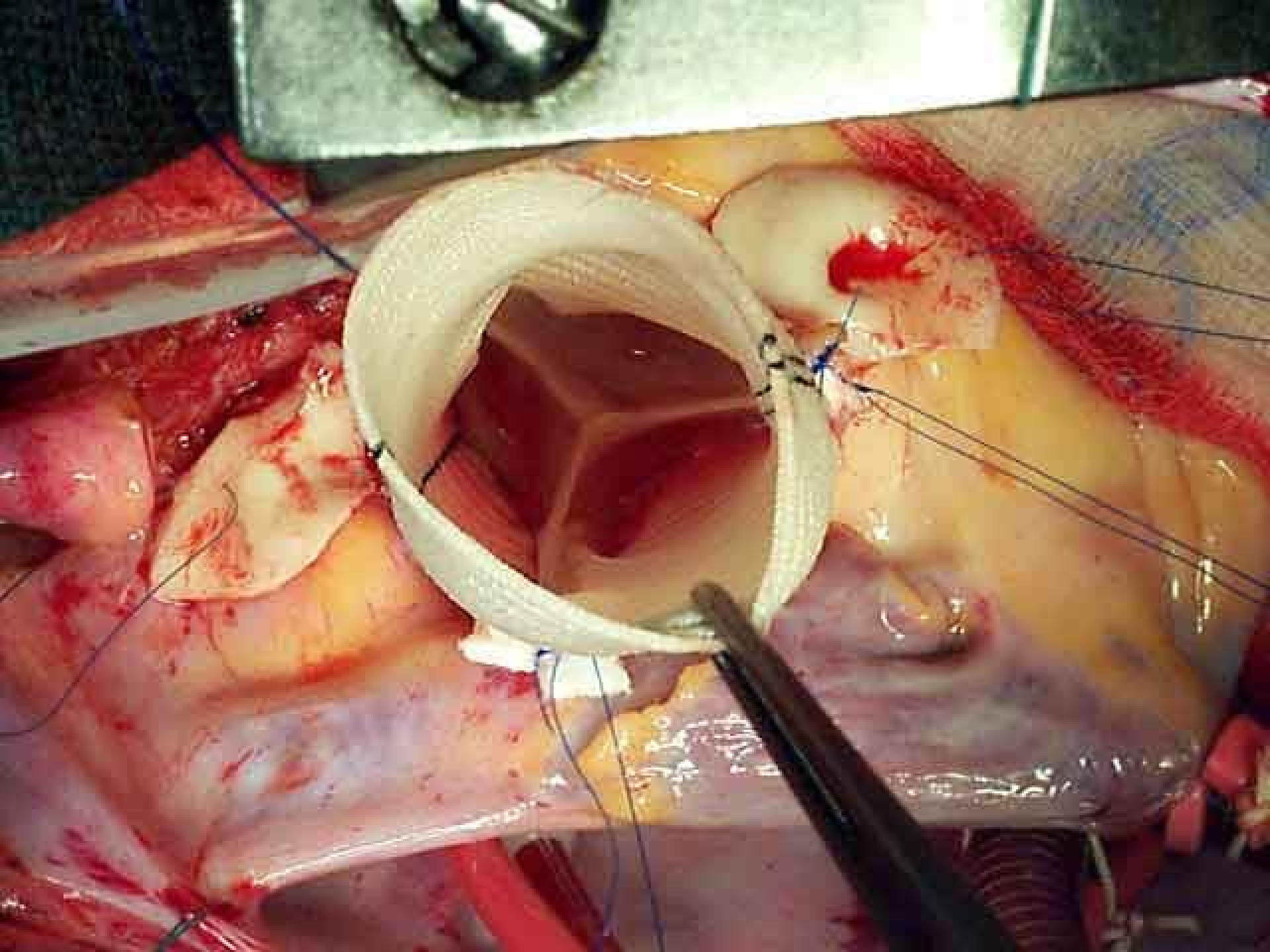


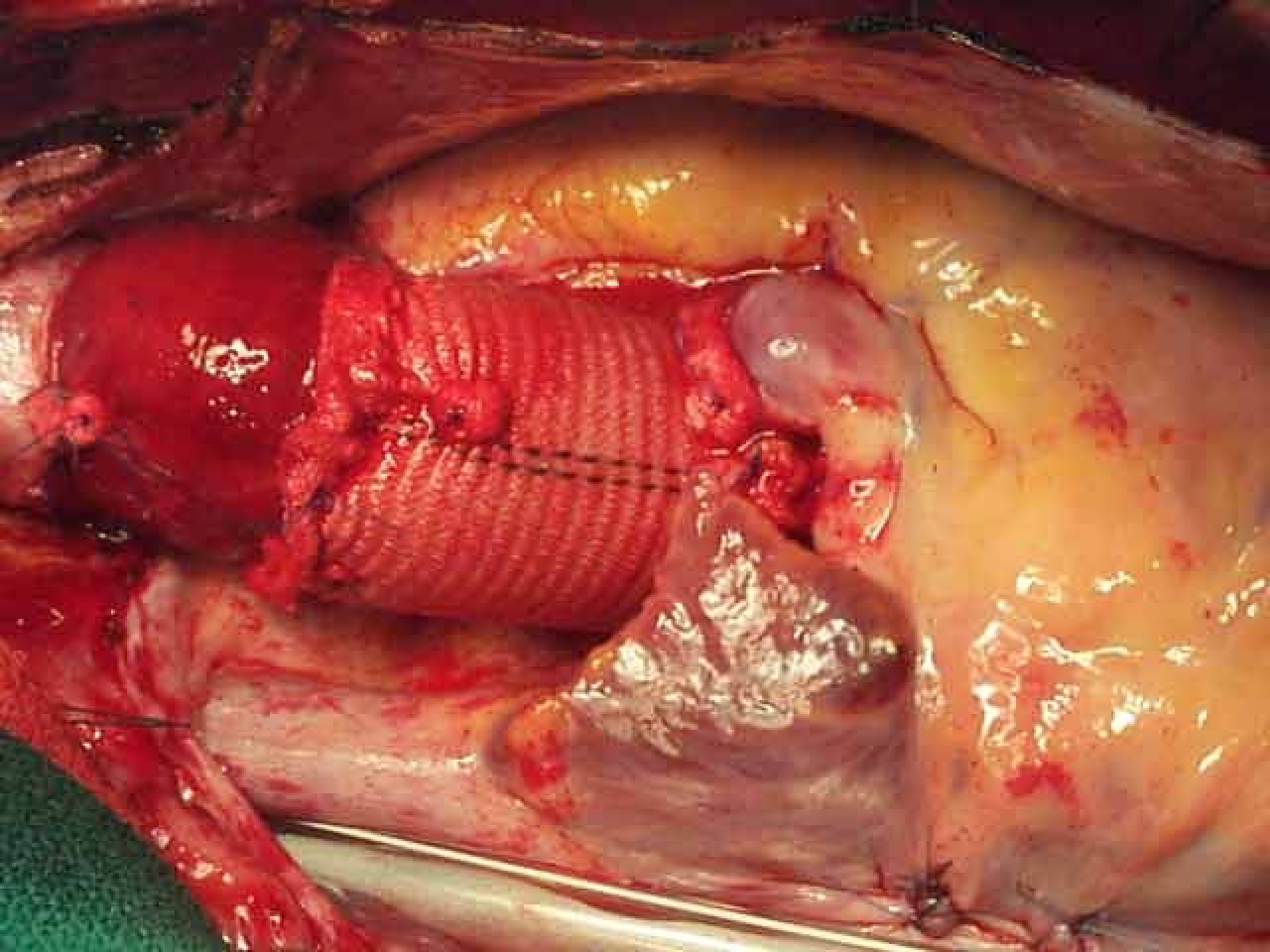


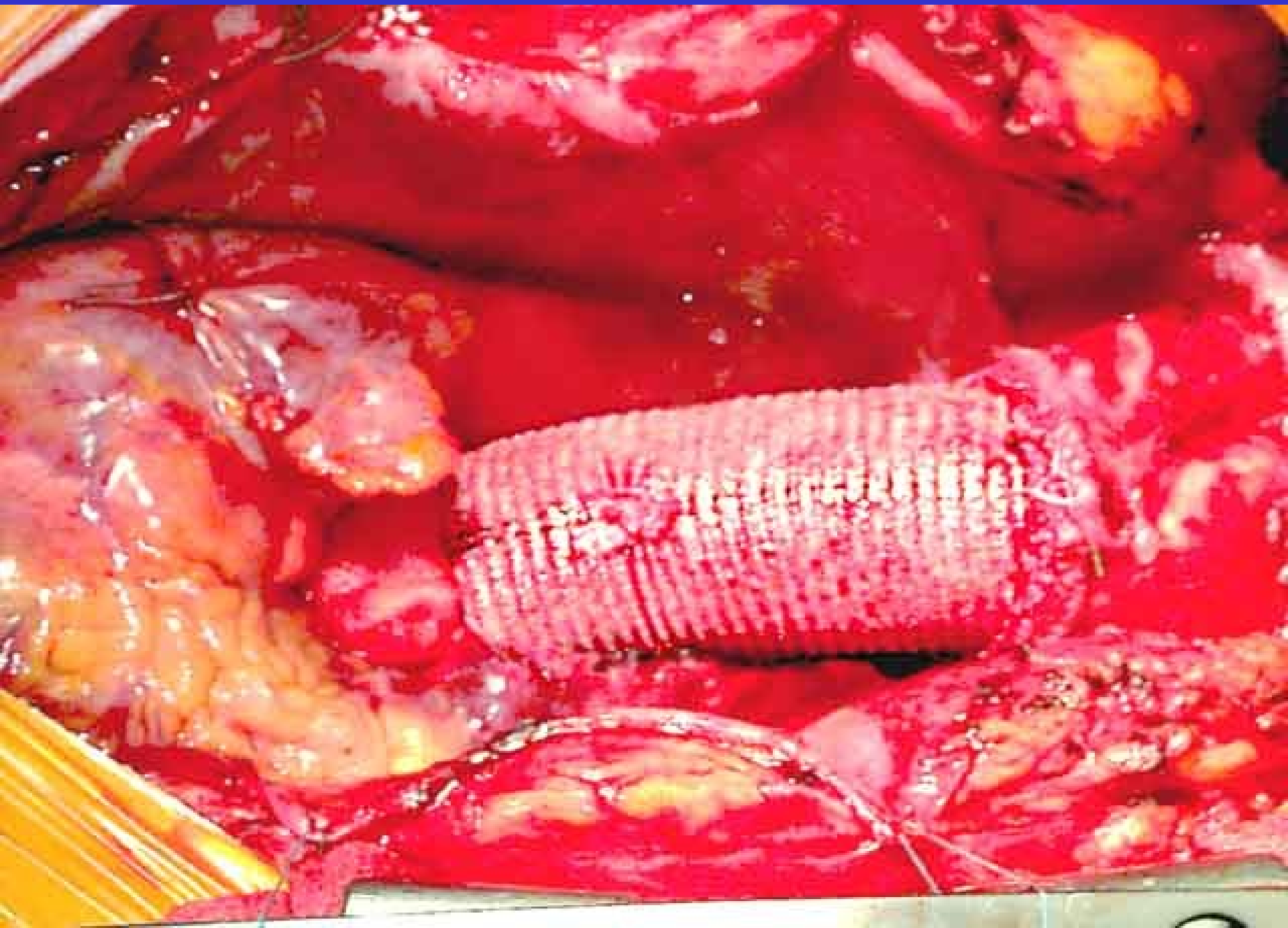




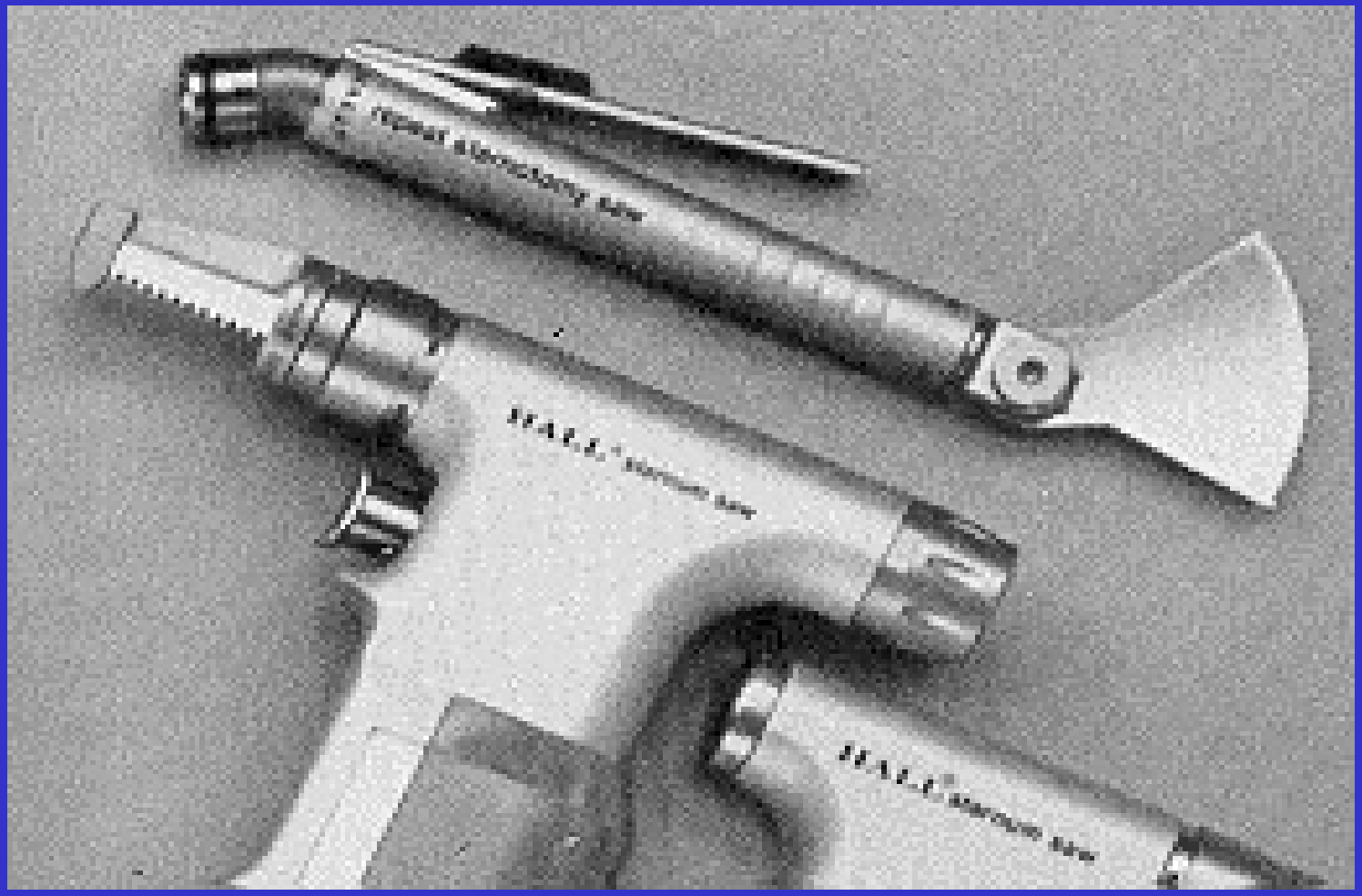








Sternal Saws



Possible Complications of Cardiac Surgery

Questions ???

Take A Break!!!

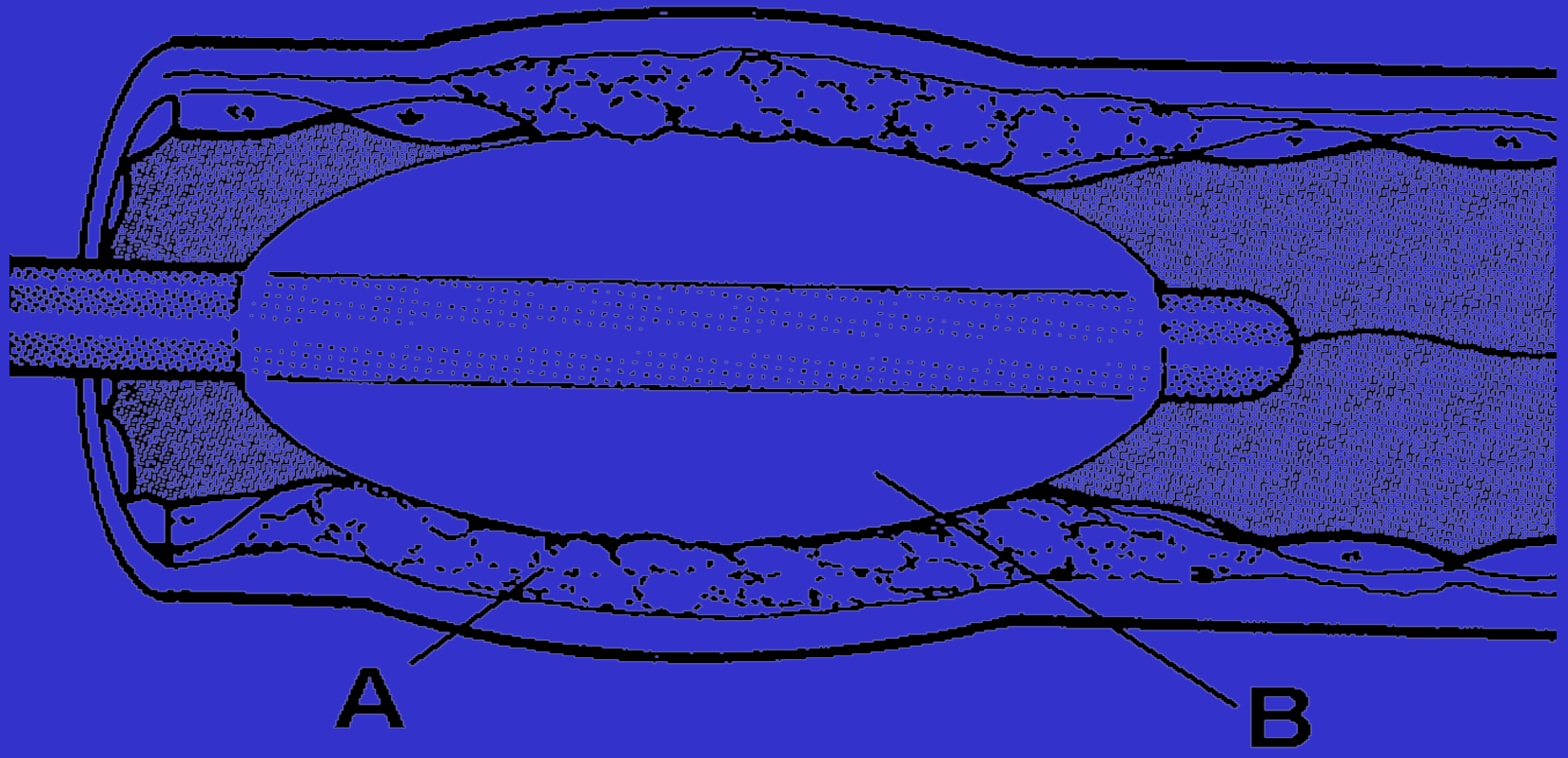
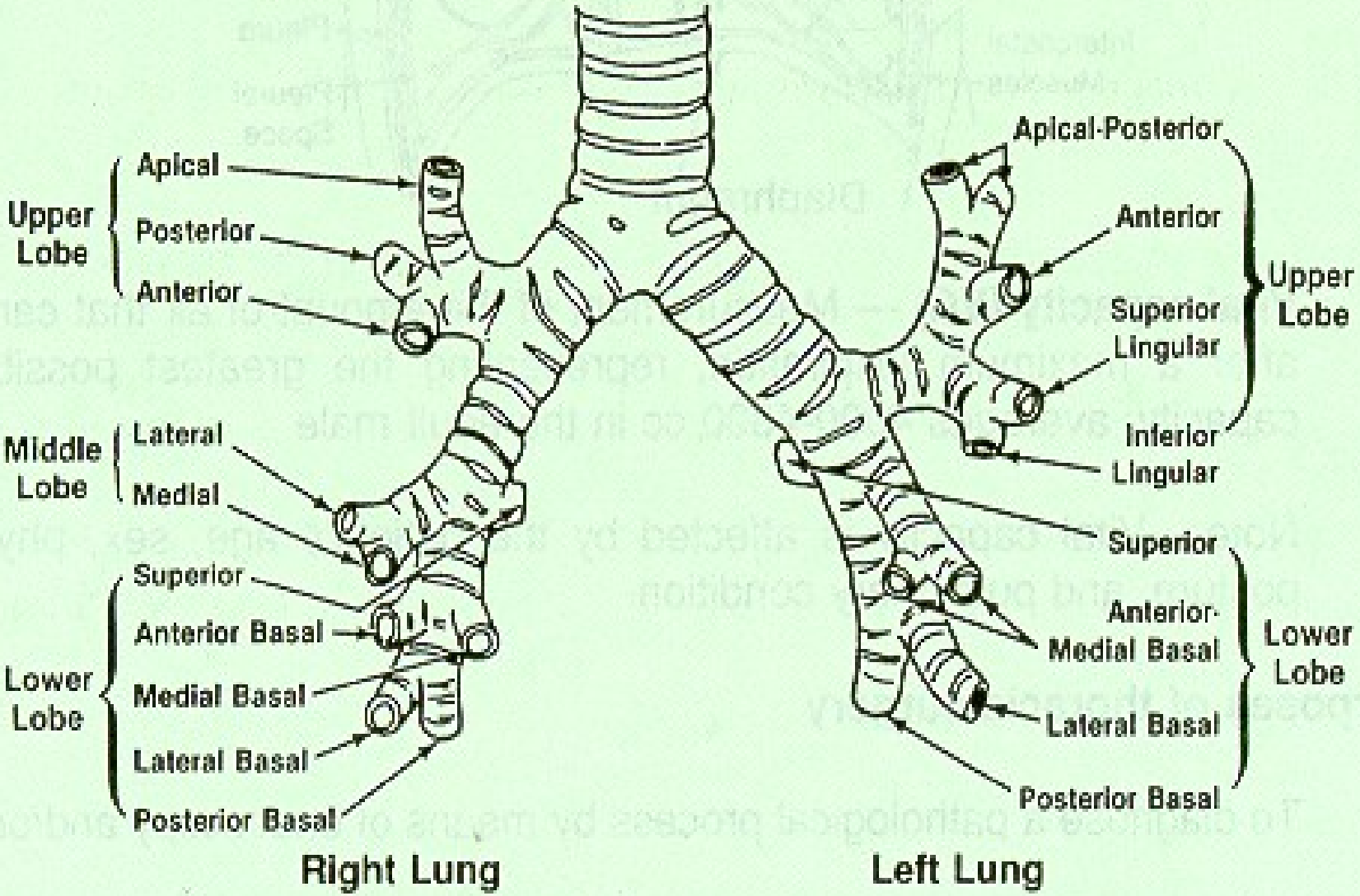
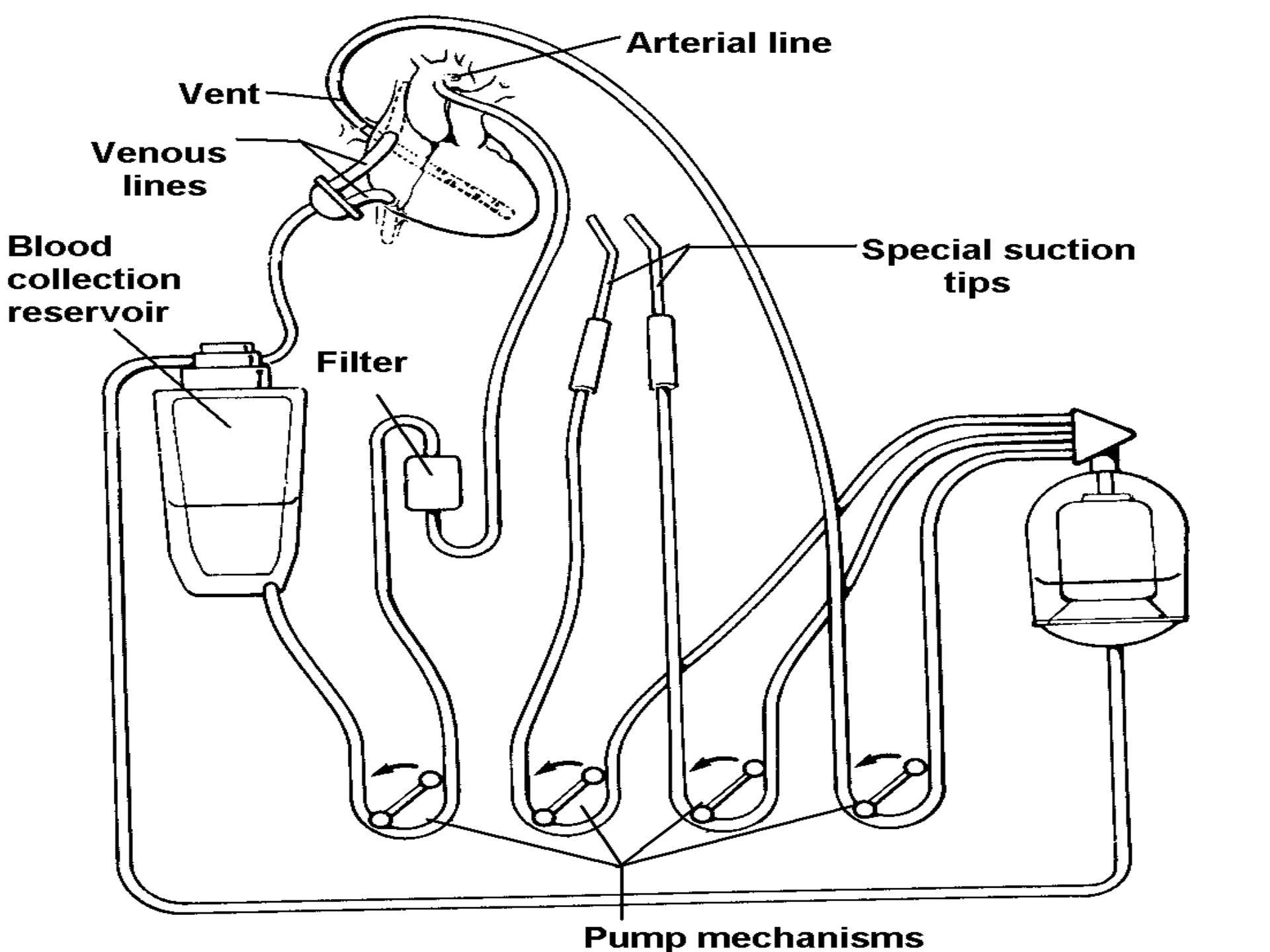

A
B

Figure 4—Segmental bronchi




Arterial line
Vent
Venous lines
Blood collection reservoir
Filter
Special suction tips
Pump mechanisms